

PATENT COOPERATION TREATY

From the
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To:

see Form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see Form PCT/ISA/210 (sheet 2)

Applicant's or agent's file reference
see Form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/001990

International filing date (day/month/year)
25.02.2005

Priority date (day/month/year)
17.03.2004

International Patent Classification (IPC) or both national classification and IPC
G02B6/38

Applicant
KRONE GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires earlier.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA



European Patent Office - Gitschiner Str. 103
D-10958 Berlin
Tel. +49 30 25901-0
Fax: +49 30 25901-840

Authorized officer

Jacobs, A

Tel. +49 30 25901-625



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

10/591647
International application No.
PCT/EP2005/001990

Box No. I. Basis of this opinion

AP20 Rec'd PCT/PTO 31 AUG 2006

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Statement

Novelty	Yes:	Claims	7,10,13
	No:	Claims	1-6, 8, 9, 11-12, 14
Inventive Step	Yes:	Claims	
	No:	Claims	1-14
Industrial Applicability	Yes:	Claims	1-14
	No:	Claims	

2. Citations and explanations:

see supplemental sheet

Re Box V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Notes under PCT Article 6
 - 1.1 It is unclear to what extent the feature that "the coupling (2) comprises a single component", which is mentioned in the characterizing clause of claim 1, is intended to be restrictive (PCT Article 6). This feature does not necessarily say that the coupling comprises precisely a single component; this wording therefore does not rule out the possibility that the coupling also comprises a plurality of components. In addition, this wording is also unclear for the reason that an individual "component" can also be composed of a plurality of parts.
 - 1.2 (i) There is a lack of clarity owing to unclear dependencies in the dependent claims: The compression spring mentioned in claim 4 is defined neither in claim 4 nor in the claim to which reference is made, claim 1. A similar objection applies to claim 7. Further examples of unclear dependencies can be found in claim 8 (ferrule flange, square, arresting part), 9 (arresting parts) or 10 (through-bores).
(ii) In the case of the features mentioned in claims 11 and 14 it is unclear what restrictions to the device are intended in terms of structural features.
2. Reference is made to the following documents:
 - D1: WO 03/076997 A (HUBER + SUHNER AG; ZUELLIG, MARC-ANDREW; EIGENMANN, DANIEL) 18 September 2003
 - D2: EP 0 731 369 A (NIPPON TELEGRAPH AND TELEPHONE CORPORATION) 11 September 1996
 - D3: DE 102 19 935 A1 (KRONE GMBH) 27 November 2003
 - D4: US 5 166 995 A (BRIGGS ET AL.) 24 November 1992
 - D5: US 4 614 402 A (CARON ET AL.) 30 September 1996

2.1 Claim 1

The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 is not novel within the meaning of PCT Article 33(2).

(i) Document D1 (see pages 7-13 and figures 1-5, see also claim 1) discloses (the references between parentheses relate to said document):

An optical fiber plug-in connection (10) (see also page 1, lines 31-32 of the present application), comprising at least one pair of plug-in connectors (13) and a coupling (11), each plug-in connector (13) having a ferrule (23) and two ferrules (23) of a pair of plug-in connectors respectively being detachably guided and aligned with respect to each other within a guiding sleeve (45) (see page 8, lines 8-12), and the coupling (11) respectively having a receptacle (insertion channels 47) for each plug-in connector of a pair of plug-in connectors, the coupling (11) comprising a single component (the coupling 11 comprises a certain component, namely the housing 12; see also the objection under point 1.1 in this regard).

Since D1 has all the features from claim 1, this publication anticipates the plug-in connection determined in this claim (PCT Article 33(2)).

(ii) Independently of this, document D2 (see in particular figure 17 and page 10, lines 30-56 in conjunction with figures 4, 5, 12 and column 7, line 35 to column 9, line 35 therein) also has all the features of claim 1 and therefore likewise deprives it of novelty within the meaning of PCT Article 33(2).

Claim 1 is in each case not novel over D3 (figures 1-4 and paragraphs [18] to [22]) and over D4 (figures 24-29, column 14, line 67 to column 18, line 4), either.

In connection with the abovementioned objection under 1.1, note will be made of the fact that both D2 and D3 describe a coupling comprising an individual cast part.

2.2 Dependent claims: As is immediately apparent from the search report and from studying document D1, D1 anticipates the features of claims 2-6, 8, 9, 11, 12 and 14 (PCT Article 33(2)). The features of claims 10 and 13 are conventional modifications known to a person skilled in the art, and those of claim 7 appear to have been anticipated by the disclosure of D5 (see figures 6 and 7) (PCT Article 33(3)).